

REMARKS

Claims 1-27 are pending in the present patent application. Claims 1-27 stand rejected. By the present Amendment, claim 27 has been amended. This application continues to include claims 1-27.

Claim 27 was rejected under 35 U.S.C. §102(b) as being anticipated by Miyachi, U.S. Patent No. 6,108,492 (hereinafter, Miyachi). Applicants respectfully request reconsideration of the rejection of claim 27 in view of the following.

Miyachi is directed to devices such as multifunction peripherals which have advanced self-monitoring capabilities (col. 1, lines 20-22). A LAN 100 includes a file server 120, workstations 150, printers 180 and a Host 110b coupled to one another via network communications lines 160 (col. 4, lines 39-42). An MFP 110a (multifunction peripheral) is coupled to the Host 110b (col. 4, lines 46-47). A remote monitoring computer 170 is coupled to the Host 110b by a public switched telephone network 130; the remote monitoring computer 170 and public switched telephone network 130 are not part of the LAN 100 (col. 4, lines 49-53).

The status information is obtained from the MFP 110a and stored in a database preferably in the non-volatile rewritable data storage device 240 of host 110b (col. 8, lines 65-67, Fig. 2). Host 110b not only obtains the multifunction peripheral status information from the MFP's non-volatile rewritable data storage device 245 and stores this information in the database, but the processor 230, under programmed control also maintains in the database a history of this status information (col. 9, lines 10-16). A technician may access the Host 110b from a workstation 150 on the LAN 100 or the remote monitoring computer 170 via modem 260 (col. 9, lines 42-45).

Applicants believe that claim 27 patentably defines Applicants' invention over Miyachi for at least the reasons set forth below.

Claim 27 is directed to a method for monitoring a printer. Previous to the present Amendment, claim 27 recited receiving first printer status information associated with a first non-networked printer from a first computer via a first network, said first non-networked printer in communication with said first computer via a first peripheral connection; and storing said first printer status information in a database configured to store said first printer status information.

Because the “first printer status information” was originally introduced in the first clause of claim 27 and provides antecedent basis for the use of that term in the second clause of claim 27, Applicants respectfully submit that the “first printer status information” that is stored in the second clause is that which was received via the first network in the first clause.

In contrast, as set forth below, Miyachi discloses that host 110b, which is connected to printer 110a, stores status information in a database residing in host 110b itself. Accordingly, Miyachi does not disclose, teach, or suggest storing first printer status information that was received via a network in a database configured to store the first printer status information, as recited in claim 27.

Nonetheless, Applicants have amended claim 27 to make explicit that which was implicit, namely, that the first printer status information stored in the database is the first printer status information that was received via the network.

Accordingly, as amended, claim 27 recites receiving first printer status information associated with a first non-networked printer from a first computer via a first network, said first non-networked printer in communication with said first computer via a first peripheral connection; and storing the received said first printer status information in a database configured to store said first printer status information.

In contrast to storing the received first printer status information in a database, wherein the first printer status information was received from a first computer via a network, Miyachi discloses that host 110b, which is connected to printer 110a, stores status information in a database that resides in host 110b itself.

For example, Miyachi discloses that the status information is obtained from MFP 110a and stored in a database preferably in the non-volatile rewritable data storage device 240 of host 110b (col. 8, lines 65-67, Figs. 1 and 2). Thus, Miyachi discloses that host 110b stores status information in a database located in that same host 110b, but without forwarding the status information to workstation 150 or remote monitoring computer 170 via a network so that it might be received via the network and then stored in a database.

Although Miyachi discloses that a technician may access the Host 110b from a workstation 150 on the LAN 100 or the remote monitoring computer 170 via modem 260 (col. 9, lines 42-45), Miyachi does not disclose, teach, or suggest software operating on host 110b that forwards the printer status information to manager software executing on workstation 150 or remote monitoring computer 170 via a network so that it might be received via the network and then stored in a database.

With claim 27, because the first printer status information that is stored in the database was received from the first computer *via a network*, it necessarily follows that the database is not associated with the first computer, but rather, is associated with the end receiver that receives the first printer status information via the network. Since the Miyachi database is in the host 110b, Miyachi does not disclose, teach, or suggest storing the received first printer status information in a database configured to store the first printer status information, wherein the first printer status information was received from the first computer via a network, as recited in claim 27.

Accordingly, for at least the reasons set forth above, Applicants respectfully submit that Miyachi does not disclose, teach, or suggest the subject matter of claim 27, and thus respectfully request that the rejection of claim 27 under 35 U.S.C. 102(b) be withdrawn.

Claims 1, 2, 4-9, 13, 14, 16-21, 25 and 26 were rejected under 35 U.S.C. §103(a) as being unpatentable over Miyachi. Applicants believe that claims 1, 2, 4-9, 13, 14, 16-21, 25 and 26 patentably define the invention over Miyachi, and thus respectfully request reconsideration of the rejection of claims 1, 2, 4-9, 13, 14, 16-21, 25 and 26 in view of the following.

Claim 1 recites, in part, first agent software installed on said first computer, said first agent software configured to obtain said first printer status information from said first non-networked printer; and manager software installed on said monitor computer, said manager software configured to obtain said first printer status information from said first agent software; and said first computer executing said first agent software to obtain said first printer status information from said first non-networked printer via said first peripheral connection, said first agent software forwarding via said first network said first printer status information to said manager software executing on said monitor computer for storage in said database.

Firstly, Applicants respectfully submit that Miyachi does not disclose, teach, or suggest manager software installed on a monitor computer, wherein the manager software is printer management software, as made clear by Applicants' specification, e.g., at page 5, lines 27-30, which is configured to obtain printer status information from agent software, as recited in claim 1.

Although Miyachi column 9, lines 1-2 disclose using the host's fax/modem to communicate status information to the remote monitoring computer, the fax/modem is not purported by Miyachi to be manager software in the context of Applicants' specification and

claims, and does not otherwise disclose, teach, or suggest manager software that is configured to obtain the printer status information from any agent software.

In addition, although column 10, lines 60-65 disclose host 110b using it's modem to upload status information selected by a technician, this is merely a reference to the host 110b uploading the status information to remote monitoring computer 170 using a modem, without any specific disclosures as might relate to or otherwise disclose, teach, or suggest manager software installed on the monitor computer being configured to obtain the status information from agent software that is installed on the first computer and is also configured to obtain the printer status information from the non-networked printer in the manner recited in claim 1.

Further, with claim 1, the agent software is installed on the first computer, and is configured to obtain the printer status information and forward the status information to the monitor computer, which is obtained by the manager software that stores it in the database.

However, Miyachi does not disclose, teach, or suggest any such agent software that performs such functions. For example, although Miyachi discloses that host 110b includes management software for managing print jobs, fax jobs and scan jobs, Miyachi does not disclose, teach, or suggest that this management software is configured to obtain the printer status information, and forward the status information to a monitor computer.

Miyachi also discloses that a technician may access host 110b from a workstation 150 or remote monitoring computer 170 (col. 9, lines 42-45). However, a technician accessing host 110b is not agent software that is configured to obtain the printer status information and forward the status information to the monitor computer.

Still further, although Miyachi discloses an option to provide an entire database, as asserted by the Examiner (col. 9, line 47), Miyachi does not disclose, teach, or suggest the use of agent software that obtains printer status information and that also provides the entire database.

Further yet, providing an entire database does not disclose, teach, or suggest agent software forwarding via the network the printer status information to manager software executing on a monitor computer for storage in a database, at least since the provision of a database does not imply or otherwise disclose, teach, or suggest storing data in that database, but rather, pertains to provision of the database itself.

Accordingly, for at least the reasons set forth above, Miyachi does not disclose, teach, or suggest the subject matter of claim 1. Claim 1 is thus believed allowable in its present form.

Claims 2 and 4-9 are believed allowable due to their dependence, directly or indirectly, on otherwise allowable base claim 1. In addition, claims 2 and 4-9 further and patentably define the invention over Miyachi.

For example, claim 6 is directed to the printer monitoring system of claim 1, wherein said first agent software is configured to receive corresponding printer status information from more than one non-networked printer directly connected to said first computer.

In contrast to claim 6, Miyachi discloses that there is preferably a one-to-one correspondence between Hosts and MFPs (col. 5, lines 34-36). Although it is asserted by the Examiner that this means that Miyachi is not limited to one-to-one correspondence, Miyachi nonetheless does not disclose, teach, or suggest how the Miyachi system would operate with more than one MFP connected to host 110b, much less that host 110b includes agent software configured to receive corresponding printer status information from more than one non-networked printer directly connected to the computer, as recited in claim 6.

Claim 6 is thus believed allowable in its own right.

Claim 7 is directed to the printer monitoring system of claim 1, further comprising at least one additional non-networked printer, each said at least one non-networked printer being in communication with said first computer via a corresponding peripheral connection, each said at least one additional non-networked printer having associated therewith a corresponding printer status information, wherein said first agent software is configured to obtain said corresponding printer status information from said at least one additional non-networked printer via said corresponding peripheral connection, said first agent software forwarding via said first network said corresponding printer status information to said manager software executing on said monitor computer, and said manager software configured to receive said corresponding printer status information from said first agent software and store said corresponding printer status information in said database.

Claim 7 is believed allowable in its own right for substantially the same reasons as set forth above with respect to claim 6.

Claim 13 is directed to a method for monitoring a printer.

Claim 13 recites, in part, executing on said first computer said first agent software to obtain said first printer status information from said first non-networked printer via said first peripheral connection, said first agent software forwarding via said first network said first printer status information to said manager software executing on said monitor computer; and executing on said monitor computer said manager software to receive said first printer status information and store said first printer status information in a database configured to store said first printer status information.

Claim 13 is believed allowable in its present form for substantially the same reasons as set forth above with respect to claim 1.

Claims 14 and 16-21 are believed allowable due to their dependence, directly or indirectly, on otherwise allowable base claim 13. In addition, claims 14 and 16-21 further and patentably define the invention over Miyachi.

For example, claim 18 is directed to the method of claim 13, said first agent software receiving corresponding printer status information from more than one non-networked printer directly connected to said first computer.

Claim 18 is believed allowable in its own right for substantially the same reasons as set forth above with respect to claim 6.

Claim 19 is directed to the method of claim 13, further comprising the step of executing on said first computer said first agent software to obtain corresponding printer status information from at least one additional non-networked printer via a corresponding peripheral connection, said first agent software forwarding via said first network said corresponding printer status information to said manager software executing on said monitor computer, and said manager software receiving said corresponding printer status information and storing said corresponding printer status information in said database.

Claim 19 is believed allowable in its own right for substantially the same reasons as set forth above with respect to claim 6.

Claim 25 is directed to a method for monitoring a printer.

Claim 25 recites, in part, receiving via said first peripheral connection said first printer status information; and transmitting via a first network said first printer status information to a monitor computer for storing in a database.

Claim 25 is believed allowable in its present form for substantially the same reasons as set forth above with respect to claims 1 and 27.

Claim 26 is directed to a method for monitoring a printer.

Claim 26 recites, in part, transmitting via said first peripheral connection said first printer status information to said first computer for transmission to a monitor computer via a first network for storage in a database configured to store said first printer status information.

Claim 26 is believed allowable in its own right for substantially the same reasons as set forth above with respect to claims 1 and 27.

Accordingly, for at least the reasons set forth above, Applicants respectfully submit that Miyachi does not disclose, teach, or suggest the subject matter of claims 1, 2, 4-9, 13, 14, 16-21, 25 and 26, and thus respectfully request that the rejection of claims 1, 2, 4-9, 13, 14, 16-21, 25 and 26, under 35 U.S.C. 103(a) be withdrawn.

Claims 3, 10-12, 15 and 22-24 were rejected under 35 U.S.C. §103(a) as being unpatentable over Miyachi, as applied to claims 1 and 13, and further in view of Sekizawa, U.S. Patent No. 6,430,711 B1 (hereinafter, Sekizawa). Applicants respectfully request reconsideration of the rejection of claims 3, 10-12, 15 and 22-24 in view of the following.

Sekizawa discloses a machine monitor system 1 made up of one integrated monitor unit, console unit 20, and a plurality of local monitor units, agent units 10 (col. 18, lines 48-53, Fig. 1). Agent unit 10 gets status information Ø1 indicating the operation state of each network printer P

connected to the LAN 3a (col. 19, lines 22-24). Agent unit 10 prepares status mail (electronic mail) Ø2 storing the status information Ø1, adds the address of the console unit 20 to the status mail Ø2 and sends the status mail Ø2 via the router 4 to the Internet 6, after which the status mail Ø2 is stored in the mail server 19 of the provider with which the agency contracts (col. 19, lines 26-31).

Applicants believe that claims 3, 10-12, 15 and 22-24 patentably define Applicants' invention over the cited references, Miyachi and Sekizawa, taken alone or in combination, for at least the reasons set forth below.

Claims 3, 10-12, 15 and 22-24 are believed allowable due to their dependence on otherwise allowable respective base claims 1 and 13, since Miyachi does not disclose, teach, or suggest the subject matter of claims 1 and 13, and since Sekizawa does not make up for the deficiency of Miyachi as with respect to claims 1 and 13, nor is it so asserted.

In addition, claims 3, 10-12, 15 and 22-24 further and patentably define the invention over Miyachi and Sekizawa, taken alone or in combination.

For example, claim 10 is directed to the printer monitoring system of claim 1.

Claim 10 recites, in part, a second network, said monitor computer connected to said second network; and transmission software installed on said monitor computer, said transmission software configured to extract said first printer status information from said database and transmit said first printer status information across said second network.

Miyachi and Sekizawa, taken alone or in combination, do not disclose, teach, or suggest transmission software installed on a monitor computer, the transmission software configured to extract first printer status information from the database and transmit the first printer status information across the second network.

Applicants hereby incorporate by reference their arguments as set forth in their previous Amendment, electronically filed May 31, 2007.

For example, Miyachi does not disclose, teach, or suggest the subject matter of claim 10, nor is it so asserted. Rather, Sekizawa is relied-upon.

In particular, the Sekizawa passage at column 3, lines 22-28 is relied upon, which is reproduced below for the sake of convenience:

The local monitor unit once stores the status information of the machines installed in the same area or in the proximity of the area through the first-type computer network and sends all or some of the stored status information to the integrated monitor unit installed at a site remote from the local monitor unit, such as a place of business, via the second-type computer network.

Applicants respectfully submit that although the relied-upon Sekizawa passage mentions sending all or some of the stored status information to an integrated monitor via a second-type computer network, the relied-upon passage is silent as to transmission software installed on the monitor computer that is configured to extract the printer status information from a database on the monitor computer and transmit it across the second network, as recited in claim 10.

Further, as set forth in Applicants' previous Amendment, electronically filed May 31, 2007, the invention of claim 10 is a three-tier hierarchical computer system with printer status information flowing from a first computer to a monitor computer, and then to a data collection computer. With the present invention's three-tier approach, (1) printer status information is obtained by the first computer connected to said first network (as recited in claim 1, from which claim 10 depends), (2) which forwards via the first network the first printer status information to the monitor computer for storage in database, and (3) wherein the monitor computer then extracts the first printer status information from the database and (4) transmits it across the second network to the data collection computer.

However, each of Miyachi and Sekizawa employ two-tier hierarchical computer systems, where the status data is obtained from the printer by one computer and then forwarded to a second computer.

The Miyachi and Sekizawa references, individually or in combination, do not disclose, teach, or suggest the fundamental aspect of a three-tier system, wherein the status information for the printer is obtained by a first computer that then forwards the information to a second computer via a network, and wherein all the second computers essentially report the status information to a third computer via another network in the manner set forth in Applicants' specification and claims.

Although Sekizawa discloses two networks, Sekizawa does not disclose, teach, or suggest the three-tier hierarchical computer system of Applicants' invention of claim 10, but rather, discloses a two-tier hierarchical computer system that uses two networks. Miyachi discloses a two-tier hierarchical computer system that uses a single network.

The concept of a three-tier hierarchical system is not disclosed by either of the cited references or the combination thereof. In addition, the combination of the two two-tier systems disclosed by Miyachi and Sekizawa would not yield the invention of claim 10.

In their previous Response, electronically filed May 31, 2007, Applicants showed that Miyachi and Sekizawa does not disclose, teach, or suggest the above-recited subject matter of claim 10 because the references, taken alone or in combination, do not disclose, teach, or suggest the concept of the three-tier hierarchical system of claim 10. The present rejection of claim 10 relies on substantially the same passage in Sekizawa as the previous rejection of claim 10.

However, respectfully speaking, the Examiner has not responded to Applicants' arguments. Under MPEP 707.07(f), an examiner must provide clear explanations of all actions

taken by the examiner during prosecution of an application, and where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it.

Applicants respectfully request the Examiner to consider and respond to Applicants' arguments regarding the above-recited subject matter of claim 10 and the corresponding three-tier hierarchical system claimed, in order to allow Applicants the full opportunity to prosecute their patent application before the U.S. Patent and Trademark Office.

Accordingly, claim 10 is believed allowable in its own right.

Claims 12, 22 and 24 are believed allowable in their own respective rights for at least the reasons set forth above with respect to claim 10.

Accordingly, for at least the reasons set forth above, Applicants respectfully submit that Miyachi and Sekizawa, taken alone or in combination, do not disclose, teach, or suggest the subject matter of claims 3, 10-12, 15 and 22-24, and thus respectfully request that the rejection of claims 3, 10-12, 15 and 22-24 under 35 U.S.C. 103(a) be withdrawn.

For the foregoing reasons, Applicants submit that no combination of the cited references teaches, discloses or suggests the subject matter of the pending claims. The pending claims are therefore in condition for allowance, and Applicants respectfully request withdrawal of all rejections and allowance of the claims.

In the event Applicants have overlooked the need for an extension of time, an additional extension of time, payment of fee, or additional payment of fee, Applicants hereby conditionally petition therefor and authorize that any charges be made to Deposit Account No. 20-0095, TAYLOR & AUST, P.C.

Should any question concerning any of the foregoing arise, the Examiner is invited to telephone the undersigned at (317) 894-0801.

Respectfully submitted,

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